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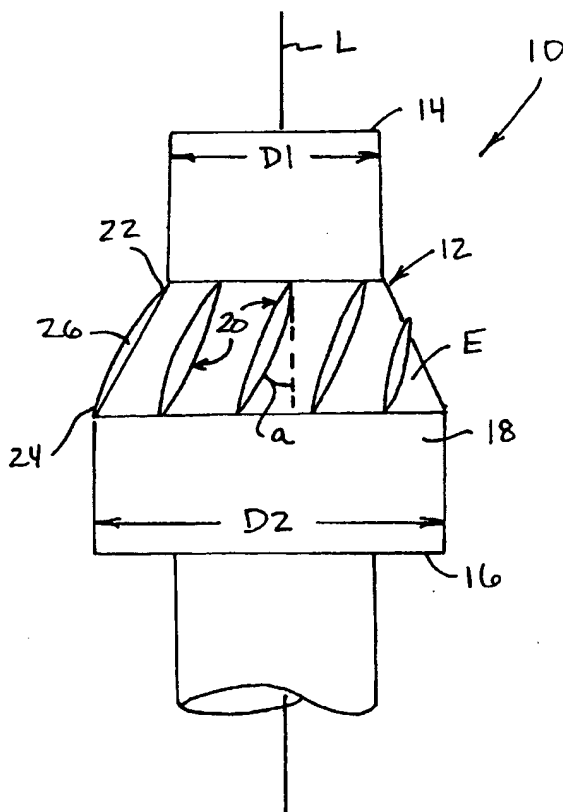
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(54) Title: ROTATING MANDREL FOR EXPANDABLE TUBULAR CASING



(57) Abstract: An expansion mandrel (10) for expanding tubular casing includes a tapered expansion portion having expansion segments (20) which are angularly disposed on an external surface of the mandrel (10). The segments (20) reduce friction and cause the mandrel (10) to rotate in response to the mandrel (10) being moved through the casing during expansion of the casing.

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A. CLASSIFICATION OF SUBJECT MATTER												
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According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X	US 6,325,148 A (Traban et al.) 4 December 2001 (04.12.2001), Fig. 9 and col. 6, lines 10-35.	1-3, 6, 9, 13-15, 17, 20										
X,P	US 6,457,532 A (Simpson) 1 October 2002 (01.10.2002), Figs. 20, 22 24, and col. 12, line 27- col. 14, line 9.	1-7, 13-17, 19										

Y,P		8, 10-12, 18, 21-22										
X	US 1,597,212 A (Spengler) 24 August 1926, (24.08.1926), Entire document, particularly Figure 1.	1-5, 13-16										

Y		8, 18										
Y,P	US Patent Application Publication 2003/0075338 (Sivley), 24 April 2003 (24.04.2003), Fig. 10 and paragraph 0118 on pages 9-10.	10-12, 21, 22										
X	US 3,039,530 A (Condra) 19 June 1962 (19.06.1962), Fig. 1, col. 1, lines 7-12.	1-3, 6, 9										
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
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